



Associate of Science with a Pre-Health Professional Focus to a Bachelor of Science in Biology

Key:

Key: **Bold Courses = count toward AU Core**

Underlined Courses = count toward AU Major

SUGGESTED SEQUENCE AT NORTH CENTRAL STATE COLLEGE		
Semester One	Equivalencies	18 Credits
BIOL 1550 Microbiology for Health Professionals	BIO 240 Microbiology for Nursing	3
<u>BIOL 2751</u> Human Anatomy & Physiology	BIO 325 Anatomy & Physiology I (1 of 3 Major Physiology course)	4
CISS 1020 Digital Literacy & Applications	MIS 221 Information Technology	3
ENGL 1010 English Comp I	ENG 101 English Comp I (CP1: AU Core 1)	3
HLTH 1150 Medical Terminology	EXS 261 Medical Terminology	2
STAT 1010 Probability & Statistics	MATH 108 Intro to Statistics (MLG: AU Core 2 & 1 of 2 AU Math for major)	3
Semester Two		16 Credits
<u>BIOL 2752</u> Anatomy & Physiology II	BIO 326 Anatomy & Physiology II (BIO major ELEC)	4
CHEM 1030 Chemistry & CHEM 1030L	CHEM 251 Molecular Architecture (NSC: Core 3)	3
ENGL 1030 English Comp II	ENG 102 English Comp II (CP2: AU Core 4)	3
HLTH 1010 Legal & Ethical Aspects of Health Care	General elective	2
MATH 1110 College Algebra	MATH Core Elective {Take MATH 1130 Pre-calc instead to count toward NCSC & 2 of 2 AU Math for major}	4
Semester Three		18 Credits
<u>BIOL 1230</u> Biology I OR BIOL 1730 Basic Anatomy & Physiology	BIO 201 Molecular & Cellular Basis of Life (strongly encouraged to take BIOL 1230 for major & NSC AU Core 5 NOT BIOL 1730)	4
CHEM 1210 Chemistry I OR PHYS 1010 Introductory Physics	CHEM 103 General Chemistry (choose CHEM 1210 NOT PHYS 1010)	5
COMM 1010 Speech	COM 101 Human Comm (COM: AU Core 6)	3
PHIL 1110 Ethics OR PHIL 1010 Western Philosophy	PHIL 215 Ethics OR PHIL 104: Intro to PHIL (Either counts as HUM: AU Core 7)	3 (3)
PSYC 1010 Intro to Psychology	PSYC 101 General PSYC (SS: AU Core 8)	3
Semester Four		18 Credits
BIOL 1101 Nutrition	General elective	2
<u>BIOL 1231</u> Biology II	BIO 202 Organisms, Adaptation, & Diversity	4
HLTH 2900 Natural Science Transfer Capstone	General elective	1
CHEM 1220 Chemistry II	CHEM 104: General Chemistry (needed prerequisite for CHEM 307 only offered FA)	5
PSYC 2010 Human Growth & Development	PSYC 209 Developmental Psychology	3
SOCY 2010 Cultural Diversity & Racism OR PSYC 2050 Abnormal Psychology	SOC 301 Race, Ethnic, & Minority (SS: AU Core 9) OR PSYC 417 Abnormal Psychol.	3 (3)
70 TOTAL CREDIT HOURS TO COMPLETE AA FROM NORTH CENTRAL STATE COLLEGE		

SUGGESTED SEQUENCE AT ASHLAND UNIVERSITY		
Semester Five	Requirement Details	13-15 Credits
CHEM 307/307L Organic Chemistry OR Institutional Requirement	Offered Fall only OR AES Core 10	4 (3)
Institutional Requirement	REL Core 11	3
Institutional Requirement	CCI Core 12	3
Biology Elective		3-4
Bio Seminar	BIO 276 (SP) or BIO 304 (FA)	1
Semester Six		13-16 Credits
Institutional Requirement OR CHEM 307/307L Organic Chemistry	AES Core 10 OR Offered Fall only	4 (3)
Institutional Requirement	HR Core 13	3
Biology Elective		3-4
Bio Seminar (choose at least one)	BIO 276 (SP) or BIO 304 (FA)	1
Choose 1 course from the 3 remaining areas	2 of 3 Cellular & Molecular OR Biodiversity OR Ecology & Evolution	3-4
Semester Seven		12 Credits
BIO 303 Genetics		4
Biology Elective		3
Institutional Requirement	AES Core 14	3
BIO 301 Professional Prep OR BIO 495 Senior Seminar	Offered Spring only	1 (1)
Bio Seminar (choose at least one)	BIO 304 (FA) or BIO 276 (SP)	1
Semester Eight		13-15 Credits
BIO 495 Senior Seminar OR BIO 301 Professional Prep	Offered Spring only	1 (1)
Institutional Requirement	HUM Core 15	3
Biology Elective		3-4
Biology Elective	If needed to reach 60 major hrs.	3
Choose 1 course from the 3 remaining areas	3 of 3 Cellular & Molecular OR Biodiversity OR Ecology & Evolution	3-4
51-58 CREDIT HOURS TO MEET AU'S BIOLOGY REQUIREMENTS. 121-128 TOTAL CREDIT HOURS TO COMPLETE BS FROM ASHLAND UNIVERSITY, INCLUDING TRANSFER CREDITS. Must earn not less than 120 semester hours to earn a baccalaureate degree.		

This Transfer Pathway presumes that CP1, MLG, NSC, CP2, COM, SS, and half of HUM were taken at North Central State College. The CCI, HR, REL AES and half of HUM core will be met at AU.

Key for Core Classes:

- COM = Communication
- CP1 = English Comp I
- CP2 = English Comp II
- MLG = Math/Logic
- REL = Religion
- AES = Aesthetics
- HUM = Humanities
- NCS = Natural Sciences
- SS = Social Sciences
- HR = Historical Reasoning
- CCI = Critical Cultural Inquiry

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